

carrier medium and method for configuring computer-based communication, where the method includes (i) obtaining respective user identifiers appropriate to identify a user of a computer to each of multiple communications applications accessible with the computer, and (ii) providing on a display screen of the computer, a graphical user interface associated with said computer-based communication, where the graphical user interface includes representations of the aforementioned multiple communications applications. In addition, the computer-usable carrier medium may include a data structure for storing a set of user identifiers, and program instructions for obtaining the user identifiers.

4. Exhibit A attached hereto is a true and correct copy of the invention disclosure consisting of nineteen (19) pages which evidences our conception date before February 6, 2001. For example, Exhibit A shows that the invention disclosure document was created on May 16, 2000. The actual date of conception (i.e., the date the invention was "workable") has been redacted from Exhibit A. The invention disclosure is only one example of an earlier conception date of our invention set forth in the claims of our captioned patent application.

5. Exhibit A establishes possession by the inventors of the captioned application and invention, as claimed. Specifically, the invention disclosure set forth as Exhibit A describes the presently claimed steps of (i) obtaining respective user identifiers appropriate to identify a user of a computer to each of multiple communications applications accessible with the computer (*see, e.g.,* Exhibit A, pages 11-19, where "communication services" are akin to "communications applications"), and (ii) providing on a display screen of the computer, a graphical user interface (GUI) associated with said computer-based communication, where the graphical user interface includes representations of the aforementioned multiple communications applications (*see, e.g.,* Exhibit A, pages 10-11, where the Conversational Convergence panel is but one example of a GUI). The invention disclosure also describes the remainder of what was set out in the captioned application claims, including the data structures and program instructions for storing and obtaining user identifiers (*see, e.g.,* Exhibit A, page 10).

REDUCTION TO PRACTICE AND DILIGENCE

6. From at least a time just prior to February 6, 2001 through the filing of the application on September 28, 2001, plans were undertaken to prepare the captioned patent application, which was

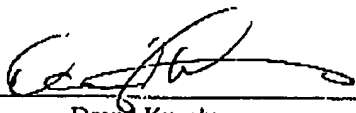
commissioned to Kevin Daffer at Conley, Rose & Tayon, P.C. We continued working on, testing and generally increasing usability functionality of our invention from at least prior to February 6, 2001 until the captioned application was filed at the U.S. Patent and Trademark Office. We did not abandon, suppress, or conceal the ideas set forth in the claimed invention during at least the time beginning prior to February 6, 2001 through the filing of the application on September 28, 2001.

7. In other words, we were duly diligent from a time prior to February 6, 2001 through the filing of the captioned application on September 28, 2001. We continued to work on our claimed invention set out in Exhibit A by building, testing, experimenting with, and generally improving the operation of our invention throughout the critical period prior to February 6, 2001 to when Mr. Daffer filed our application on September 28, 2001. After performing the mental steps required to conceive the invention, the inventive concepts were translated into source code, followed by testing and debugging procedures to optimize the code during the critical time period.

8. Upon information and belief, it is my informed understanding that diligence in reducing the invention to practice was therefore maintained from at least as early as February 6, 2001 through the filing of the application on September 28, 2001.

9. We hereby declare that all statements made herein of our own knowledge are true and that all statements made herein on information and belief are believed to be true; and further that those statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: 7 October 2005



David Kurnhyr

**Disclosure AUS8-2000-0539**

Prepared for and/or by an IBM Attorney - IBM Confidential

Created By: David Kumhyr Created On: 05/16/2000

Last Modified By: Nancy Werchan Last Modified On: 05/16/2000

Required fields are marked with the asterisk (*) and must be filled in to complete the form.

***Title of disclosure (In English)**

Conversational convergence software

Summary

Status	Final Decision (File)
Docket Family	AUS9-2001-0402
Processing Location	AUS
Functional Area	58 - TIVOLI (B. Yellin, David Murphy, L. Wilczak, J. Ciulla, Jim Hilbert)
Attorney/Patent Professional	Leslie Van Leeuwen/Austin/IBM
IDT Team	John Sweltzer/Tivoli Systems; Sebastian Hassinger/Tivoli Systems; Nicole Harbour/Tivoli Systems; Doug A Wood/Tivoli Systems; Peg MacPhail/Tivoli Systems; Rabindranath Dutta/Austin/IBM
Submitted Date	05/16/2000
Owning Division	TIV
Incentive Program	
Lab	
Technology Code	
PVT Score	40

Inventors with a Blue Pages entry

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MacPhail, M.G. (Peg)	990022	46/1X9A	436-1464	Sweltzer, J.W. (John)

> denotes primary contact

Inventors without a Blue Pages entry**IDT Selection*****Main Idea**

To view the main idea for this disclosure, click on this doclink --> (If you are prompted to enter a server name, please enter D01DB016)

Critical Questions (Questions 1-9 must be answered in English)*Patent Value Tool (Optional - this may be used by the inventor and attorney to assist with the evaluation)**

Page 1

Main Idea for disclosure AUS8-2000-0539 - continued

**Main Idea for Disclosure AUS8-2000-0539**

Prepared for and/or by an IBM Attorney - IBM Confidential

Archived On: [REDACTED]

Title of disclosure (in English)

Conversational convergence software

Idea of disclosure:

1. Describe your invention, stating the problem solved (if appropriate), and indicating the advantages of using the invention.

Merging the technologies of the chat room, instant messenger, email and web forum. Each individual component here is a method of exchanging information (groupware) that are focused on a slightly different paradigm of information exchange or conversation. Mostly divided by response time and user role.

Chat rooms are akin to a meeting, instant messaging is like a phone call, email is akin to a memo or letter and forums are like a moderated and categorised discussion. All serve different purposes and have differing strengths, all are misused to attempt to stretch the medium to act like another.

I propose the merging of all of the function in one product that would enable the conversation holders to move to another conversation style or domain as the need arose.

2. How does the invention solve the problem or achieve an advantage, (a description of "the invention", including figures inline as appropriate)?

Enable the flow of conversation to move into using the medium that most suits the style of the discussion. It becomes a better business model for solving problems remotely on line.

3. If the same advantage or problem has been identified by others (inside/outside IBM), how have those others solved it and does your solution differ and why is it better?

Yes, but each in the individual area of communications, not almagamated.

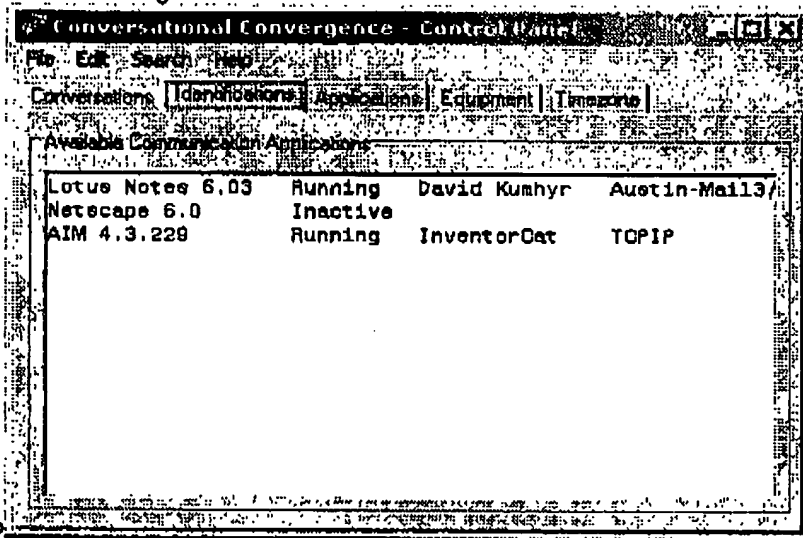
4. If the invention is implemented in a product or prototype, include technical details, purpose, disclosure details to others and the date of that implementation.

No

AUS8-2000-0539 Conversational convergence software - continued

Search Information**Search Office Information****Final Decision****Post Disclosure Text & Drawings**

Enter any additional information relating to this disclosure below:



CCS.ppt CCSProposalA.pp



Ideas/splits:

CAT Brokering site

One time certificates for membership authentication by role

Idea	Variations	Applications
ID set		CCS basic idea of switching communication application
	Roles	Tailor communications based on Role <ul style="list-style-type: none"> Who must be there Level of interest Field of Interest Actions allowed Delegation of role Policy and rules based on role Assign a role to a set of ids
	Permissions	Tailor communications based on permissions <ul style="list-style-type: none"> Level of trust Level of interest Field of Interest Actions allowed Delegation of permissions along with role - perhaps a subset when delegated Permissions based on policy and rules, roles Assign permissions to a set of ids
	Nesting	Nest sets of ids Nest permissions
	Aggregation	Aggregate sets of ids

AUS8-2000-0539 Conversational cc gence software - continued

		Aggregate based on role
	Certificate to join	3rd party
Availability determination		Determine current availability all members for the set of communications services Track down an individual - know what commo works at this moment for them
	Delegation	
	Next available window	
Categorize communications service		Scatter/Gather - using multiple communication mechanisms <ul style="list-style-type: none"> • "teleport" • "resting?" • redundant • insurance • security • service level

Here is our breakdown of the separate filings under CCS/CAT - I'll append this note into the applicaiton.

Communications Convergence (Communications Aggregation Technique - CAT)

A software application that enables switching between various communications mechanisms as a user chooses as their communication needs change. i.e. switching from email to instant messaging on the fly.

CAT Brokering Web/Server Site

A brokering web server site for enabling users to gather and select and switch between communications methods and channels.

Communications Switching Object

An object (ID set) that allows the gathering of different user IDs and optionally passwords for use with CAT Communications Switching Object.

Aggregation of Communications Groups

Aggregation of communications object IDs into groups (extended functionality)

Nesting of Communications

Nesting sets of IDs and permissions

Automatic Selection of Efficient or Appropriate Communications Channel

Automatically select the most efficient or communications channel or means - or select the appropriate channel for the level of service or security specified by role and permissions.

Tailoring of Communications Based on Permissions and Role

Tailoring the communications channel based on permissions and role (trust, interest, actions)

Scatter/Gather Using Multiple Communications Channels

Scatter/Gather using multiple communications channels for redundancy, security, insurance etc.

Certification for Joining Communications Channel at a Trust Level

Certification for joining communications channel or group at a specified trust level.

Aggregation of Trust Certificates

Aggregation of trust certificates for joining or promoting trust level.

AUS8-2000-0539 Conversational cc gence software - continued

Availability determination and next availability window

Availability determination of a communications time and determining the next availability window

(Form Revised 12/17/97)

AUS0-2000-0539 Conversational cc gence software - continued

Doug A Wood/Tivoli Systems Peg MacPhail/Tivoli Systems Rabindranath Dutta/Austin/IBM	
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Response Due to IP&L : [REDACTED]

***Main Idea**

To view the main idea for this disclosure, click on this doclink --> [REDACTED] (If you are prompted to enter a server name, please enter D01DB010)

Critical Questions (Questions 1-9 must be answered in English)**Question 1**

On what date was the invention workable? [REDACTED] Please format the date as MM/DD/YYYY (Workable means i.e. when you know that your design will solve the problem)

***Question 2**Is there any planned or actual publication or disclosure of your invention to anyone outside IBM? ☐ Yes ☒ No

If yes, Enter the name of each publication or patent and the date published below.

Publication/Patent:

Date Published or Issued:

Are you aware of any publications, products or patents that relate to this invention? ☐ Yes ☒ No

If yes, Enter the name of each publication or patent and the date published below.

Publication/Patent:

Date Published or Issued:

***Question 3**Has the subject matter of the invention or a product incorporating the invention been sold, used internally in manufacturing, announced for sale, or included in a proposal? ☐ Yes ☒ NoIs a sale, use in manufacturing, product announcement, or proposal planned? ☐ Yes ☒ No

If Yes, identify the product if known and indicate the date or planned date of sale, announcements, or proposal and to whom the sale, announcement or proposal has been or will be made.

Product:

Version/Release:

Code Name:

Date:

To Whom:

If more than one, use cut and paste and append as necessary in the field provided.

***Question 4**Was the subject matter of your invention or a product incorporating your invention used in public, e.g., outside IBM or in the presence of non-IBMers? ☐ Yes ☒ No

If yes, give a date. Please format the date as MM/DD/YYYY

***Question 5**Have you ever discussed your invention with others not employed at IBM? ☐ Yes ☒ No

If yes, identify individuals and date discussed. Fill in the text area with the following information, the

AUS8-2000-0539 Conversational cc gence software - continued

names of the individuals, the employer, date discussed, under CDA, and CDA #.

***Question 6**

Was the invention, in any way, started or developed under a government contract or project?

☐ Yes
☒ No
☐ Not sure

If Yes, enter the contract number

***Question 7**

Was the invention made in the course of any alliance, joint development or other contract activities?

☐ Yes
☒ No
☐ Not Sure

If Yes, enter the following:

Name of Alliance, Contractor or Joint Developer

Contract ID number

Relationship contact name

Relationship contact E-mail

Relationship contact phone

***Question 8**

Have you, or any of the other inventors, submitted this same invention disclosure or similar invention disclosure previously?

☐ Yes
☒ No

If Yes, please provide disclosure number below:

***Question 9**

Are you, or any of the other inventors, aware of any related inventions disclosures submitted by anyone in IBM previously?

☐ Yes
☒ No

If Yes, please provide the docket or disclosure number or any other identifying information below:

Question 10

What type of companies do you expect to compete with inventions of this type? Check all that apply.

- ☐ Manufacturers of enterprise servers
- ☐ Manufacturers of entry servers
- ☐ Manufacturers of workstations
- ☐ Manufacturers of PC's
- ☐ Non-computer manufacturers
- ☐ Developers of operating systems
- ☒ Developers of networking software
- ☒ Developers of application software
- ☐ Integrated solution providers
- ☒ Service providers
- ☒ Other (Please specify below)

Ideal groupware product to extend Lotus Notes

Question 11

If the invention relates to a product or service that is outside the scope of your business unit, please recommend IBM business unit(s), IBM location(s) or individual(s) within IBM that you think would provide a good evaluation of your invention:

AUS8-2000-0539 Conversational cc gence software - continued

Patent Value Tool (Optional - this may be used by the inventor and attorney to assist with the evaluation)
(The Patent Value tool can be used by the inventor(s) to determine the potential licensing value of your invention.)

These are the answers which were entered into the Patent Value Tool. If you would like to modify these answers and recalculate the PVT score, click on the 'Calculate' button.

Market

What is the anticipated annual market size (in dollars) that will be captured by your invention?

\$100M to \$1B

Reason(s) for above Answer Email and remote communications are pervasive technologies and are critical business tools. This extends those tools.

CLAIMS

Question 1 - How new is the technical field?

Emerging

Reason(s) for above Answer New applications are arriving.

Question 2 - How central is the invention to the product(s) which might be expected to contain the invention?

Main

Reason(s) for above Answer Integrated into existing groupware.

Question 3 - What is the scope of the claim?

Fundamental

PORTFOLIO NEED

What are the portfolio needs in the area of your invention?

Unlisted

EXPLOITATION & ENFORCEMENT

Question 1 - How easily can the use of the invention by a competitor be detected?

Trivially

Reason(s) for above Answer Obvious functionality.

Question 2 - How easily can the use of the invention be avoided by a competitor?

Unavoidable

Reason(s) for above Answer To achieve this function they must merge the same manner.

BUSINESS VALUE

Question 1 - What percentage of the companies producing products in the field of this invention might use this invention?

Broadly cloned

Question 2 - What is the value of this patent to current or anticipated Alliance Activity between IBM and other companies?

High value

Question 3 - What is the value of this patent to current or anticipated Technology Transfer Activity between IBM and other companies?

Some value

Question 4 - Does it result in prestige to IBM?

Industry wide

Evaluation

Communications Aggregation Technique Premise

A merger of communications technologies of IP, NetBios, ODI, NDIS, LSL etc. Aggregating and connecting the applications riding on these protocols; email, instant messenger, web forum, IP phone...

Each individual component is a method of exchanging information that are focused on a slightly different paradigm of exchange or conversation. Most are divided by response time and user role.

Interconnecting (bridging) these forms of communications and roles offers major extension of utility and creates new ways of communicating.

And relieves communications aggravation!

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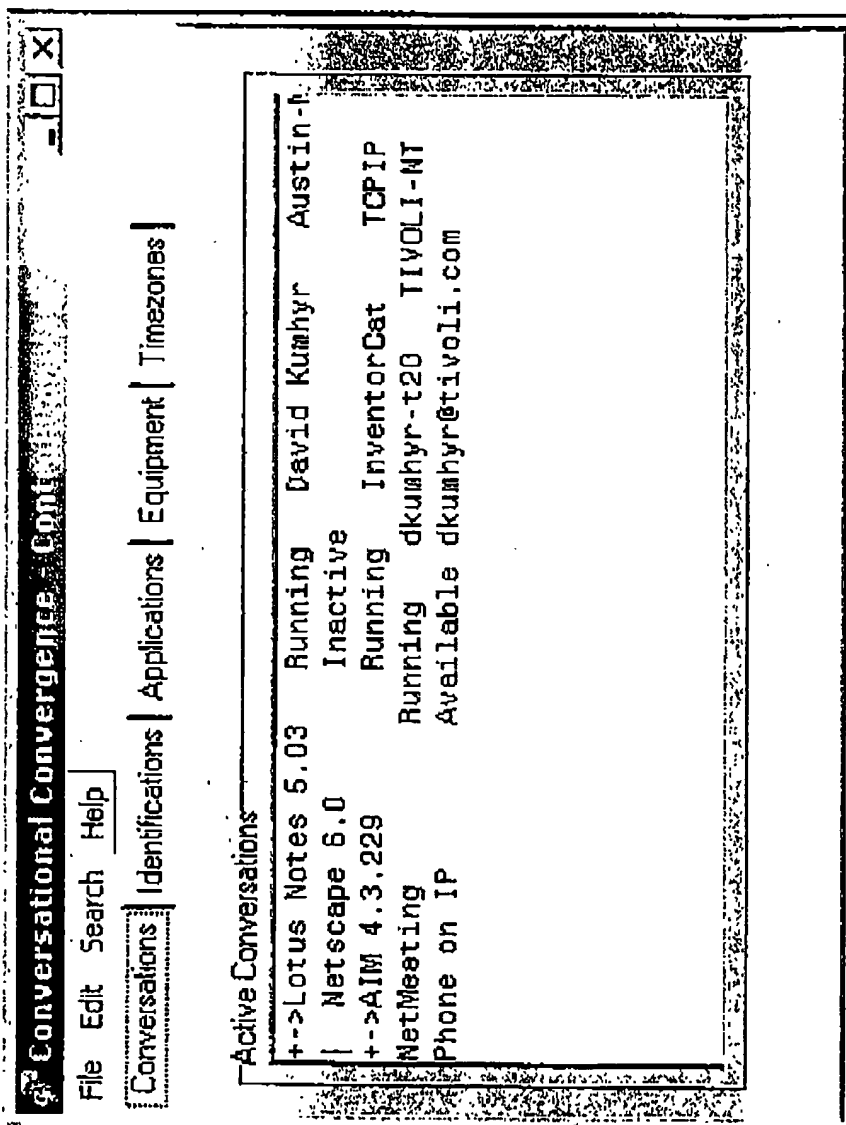
Initial Variant

1. A communications console (CCS) that enables the conversation holders to move to another conversation style or domain as the need arose.
2. A database of objects that represent IDs and connections that can migrate between the various communications applications.
3. A communications API that would enable any kind of communications service to plug into the board to allow switching between communication services.

Enables the flow of conversation to move into using the medium that most suits the style of the discussion. It becomes a better model for solving problems remotely on line.

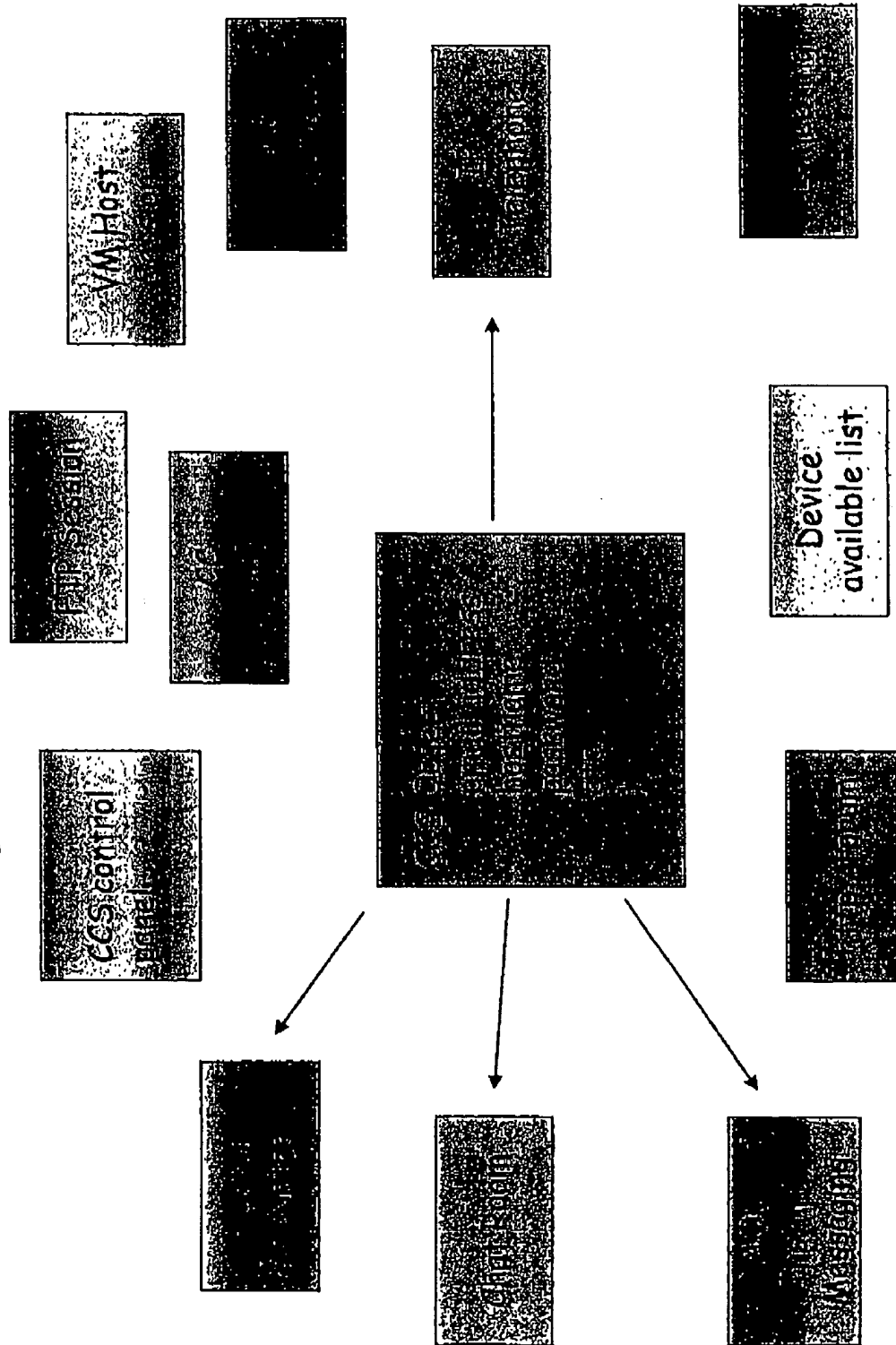
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CAT Console Prototype



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CCS Object Interactions



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Idea Splits

- Software application that enables switching between communications mechanisms as user chooses as communication needs change.
- A brokering web server site for enabling users to gather and select and switch between communications methods and channels.
- An object (ID set) that allows the gathering of different user IDs and optionally passwords for use with Communications Switching.
- Scatter/Gather using multiple communications channels for redundancy, security, insurance etc.
- Aggregation of communications object IDs into groups (extended functionality)
- Nesting sets of IDs and permissions.
- Representation of availability of services, equipment and persons.
- Automatically select the most efficient or communications channel or means - or select the appropriate channel for the level of service or security specified by role and permissions.
- Tailoring the communications channel based on permissions and role (trust, interest, actions)
- Certification for joining communications channel or group at a specified trust level.
- Aggregation of trust certificates for joining promoting trust level.

CCS Interaction Scenarios

Scenario1. User installs a local version of CCS (lCCS)

Step 1: lCCS finds CCS-enabled communications services already installed

Step 2: For each CCS-enabled service, lCCS retrieves the local Ids and Passwords. Note: the password for an Id is only retrieved where the user has allowed the password to be saved and retrieved for CCS. The user sets this preference in the CCS-enabled service.

Step 3: lCCS asks the user to configure communication services ID sets, that is, if a user has a chat id of Fred, a forum id of Freddie, and an email id of Frederick, a set of service ids could be (Fred on chat, Freddie on forum, Frederick on email). Later, when the user moves from chat to email, the user id changes from Fred to Frederick. Passwords can be added in this step, if the user desires. Any missing passwords or incorrect passwords can be picked up later when the user switches to the new service.

Step 4: lCCS publishes the user id set(s) for this lCCS address to the server CCS (sCCS)

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CCS Interaction Scenarios

Scenario 2. User switches communication services using CCS

Step 1: Each user in the communication, makes sure that the appropriate availability for each CCS-enable communications service is set appropriately.

Step 2: A communication is started

Step 3: The CCS-enable service informs ICCS that a communication has started and passes the list of communication ids to ICCS.

Step 4: ICCS retrieves the id sets (without passwords) from the SCCS for each of the ids on the communication list

Step 5: ICCS asks the SCCS to get the current availability set for each of the ids on the communication list.

Note: When the ICCS obtains and refreshes the current availability set is configurable.

Step 6: SCCS asks each ICCS for the availability set corresponding to the id it serves

Step 7: SCCS gives the availability sets to each ICCS for display with the communication.

Step 8: The user selects the CCS-communication-id-list icon displayed within the CCS-enabled communications service, and drags and drops this icon on another CCS-enabled communications service.

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CCS Interaction Scenarios

Scenario 2. User switches communication services using CCS (Continued)

Note: The first communications service may be optionally closed either by default or by explicitly closing it.

Step 9: The second CCS-enabled communications service, passes the communications id list associated with the CCS-icon to the ICCS.

Step 10: ICCS matches ids associated with the first CCS-enable communications service with the appropriate ids associated with the second communications service if the id associated with the second service is available to use the second service.

Note: refreshing of availability can be done again or can be done at the SCCS

Step 11: ICCS passes the appropriate ids for the second service along with the local user's password for auto-login.

Step 12: The second communications service fires up

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CCS Interaction Scenarios

Scenario3. Distributed CCS

Step 1: User fires-up a CCS-enabled communications system with Ids for the communications list and starts communication with entities associated with the Ids.

Step 2: Initiator CCS-enabled communication system determines which called entities, if any, are CCS-enabled.

Step 3: Initiator CCS-enabled communication system retrieves the ID set from each of the other CCS-enabled communications systems along with the availability information.

Step 4: The CCS-enabled communication system passes the ID sets to its ICCS.

Step 5: Initiator CCS-enabled communication system shares the ID sets and availability information obtained with all of the other CCS-enabled communications systems

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CCS Interaction Scenarios

Scenario 24. User switches communication services using D-CCS

Step 1: Each user in the communication, makes sure that the appropriate availability for each CCS-enabled communications service is set appropriately.

Step 2: A communication is started as in Steps 1-5 in Scenario 3

Step 3: The user selects the CCS-communication-id-list icon displayed within the CCS-enabled communications service, and drags and drops this icon on another CCS-enabled communications service.

Note: The first communications service may be optionally closed either by default or by explicitly closing it.

Step 4: The second CCS-enabled communications service, passes the communications id list associated with the CCS-icon to the ICCS.

Step 5: ICCS matches ids associated with the first CCS-enable communications service with the appropriate ids associated with the second communications service if the id associated with the second service is available to use the second service.

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CCS Interaction Scenarios

Scenario 4. User switches communication services using CCS (Continued)

Note: The first communications service may be optionally closed either by default or by explicitly closing it.

Step 6: The second CCS-enabled communications service, passes the communications id list associated with the CCS-icon to the ICCS.

Step 7: ICCS matches ids associated with the first CCS-enable communications service with the appropriate ids associated with the second communications service if the id associated with the second service is available to use the second service.

Note: refreshing of availability can be done again or can be done at the SCCS

Step 8: ICCS passes the appropriate ids for the second service along with the local user's password for auto-login.

Step 9: The second communications service fires up

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